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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,308	11/25/2003	Yuhong Zheng	1-23791	7071
46582	7590	06/07/2006	EXAMINER	
MACMILLAN, SOBANSKI & TODD, LLC ONE MARITIME PLAZA - FOURTH FLOOR 720 WATER STREET TOLEDO, OH 43604			BURCH, MELODY M	
			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/721,308	Applicant(s) ZHENG ET AL	
	Examiner Melody M. Burch	Art Unit 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,4,6-8,15,16,18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15,16 and 19 is/are allowed.
- 6) ☒ Claim(s) 3,4,6-8 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4, 6-8, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: claims 4 and 18. The phrase "an apply valve" in line 3 is indefinite. It is unclear to the Examiner whether the apply valve in claim 18 is intended to be the same or different from one of the "at least one valve in the valve arrangement" as recited in claim 3. A similar issue exists with the recitation of "a release valve" in claim 4. If Applicant intends for the apply and release valves to be the same as the at least one valve in the valve arrangement then the claims should include such language as --wherein the at least one valve in the valve arrangement includes an apply (release) valve-- to avoid confusion.

The remaining claims are indefinite due to their dependency from claims 4 and 18.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4420289 to Silhouette in view of US Patent 4278403 to Shafer.

Re: claim 13. Silhouette discloses in col. 5 lines 35-46 a method for controlling the pressure in an electrohydraulic braking system having a pump 3c, accumulator 6, and a valve arrangement controlling pressure at a vehicle brake, comprising the steps of: sensing an accumulator pressure, comparing the sensed accumulator pressure to a preset pressure setpoint S1 corresponding to point F in figure 2, controlling at least one valve 10 in the valve arrangement to allow fluid flow through the valve if the sensed accumulator pressure at least equals the preset pressure set point, determining that the pump is running while accumulator pressure is above a pump shut off pressure corresponding to point D in figure 2.

Silhouette includes a means of compensating for the excess pressure accumulation by stopping the pump, but fails to disclose that means as providing a signal to bias the at least one valve to rapidly open to a point in excess of that which would be demanded based on accumulator pressure alone in anticipation of further pressure rise due to the pump failing to shut off.

Shafer teaches in col. 3 lines 27-28 the existence of a problem of excessive pressure building up in an accumulator before the pump is stopped and in col. 2 lines 58-61 the use of opening a normally closed valve in excess of a normal amount for pressure relief purposes.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the means for compensating for excessive

accumulator pressure of Silhouette to have included the opening of a valve in excess of a normal amount for pressure relief purposes, in view of the teachings of Shafer, in order to provide a means of adequately reducing pressure to alleviate the overpressure condition.

Re: claim 18. As best understood, valve 10 may be considered to be an apply valve.

Response to Amendment

5. The finality of that action is withdrawn in light of the new grounds of rejection presented above with respect to claims 3 and 18. The current Office action is based on entry of the amendment filed 5/15/06 since new claim 19 did not raise any new issues.

Allowable Subject Matter

6. Claims 15, 16, and 19 are allowed. In the advisory action of 5/23/06 Examiner states that "new claim 11" included new limitations that required further consideration. Examiner notes that the phrase "new claim 11" was intended to read --new claim 19--. In a brief discussion with Applicant's representative on 5/31/06 it was argued that claim 19 was simply a combination of claim 13 and 14. Upon further review, Examiner agrees that claim 19 is simply claim 14 rewritten in independent form. Accordingly, claim 19 is allowed.

7. Claims 4 and 6-8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mmb
June 2, 2006

Melody M Burch
Melody Burch
Primary Examiner
6/2/06